

THE IT IMAGE OF A CITY (ON THE EXAMPLE OF KHARKIV, UKRAINE)

Dans cet article, il s'agit des composants de l'image touristique de la ville moderne; des contradictions qui se posent lorsque on essaye d'identifier les éléments de la stratégie de cette image; des exigences aux positionnement des villes comme destinations touristiques; des tendances du développement de la ville dans le concept de "smart city" et d'introduction des technologies innovantes dans le domaine de l'information et des Internet-communications. A l'exemple de Kharkiv (Ukraine) on fait une tentative de justifier les facteurs majeures de l'interaction du tourisme et des industries IT pour développer des nouveaux produits touristiques, on présente une caractéristique générale du marché du tourisme national et ses particularités, qui forme la demande des services touristiques et des améliorations des infrastructures de loisirs, et on décrit le potentiel du tourisme de Kharkiv.

The article discovers the components of the tourism brand of a modern city; identifies the major contradictions that arise when attempting to identify the elements of the branding strategy, the requirements for the positioning of cities as tourist destinations, the city's development trends within the concept of a "smart city" and implementation of innovative technologies in the field of information and Internet communications; on the example of Kharkiv (Ukraine), attempts to substantiate the key factors in the interaction of the tourism and IT industries in order to develop new tourism products, gives the general characteristic of the national tourism market and its peculiarities, forming the demand for tourist services and approaches to the arrangement of recreational infrastructure, provides an overview of Kharkiv tourism potential.

Forming a successful image of a city is its obvious competitive advantage as a tourist destination, but the process of it is usually more complex than the positioning of a country in general or a resort area. On the one hand, cities compete with each other within the borders of the country, especially neighbouring ones and those with a common history. Also tourists subconsciously perceive the city as something more dynamic, diverse, constantly changing, opposed to rural recreational areas or prominent separate tourist sites. Consequently, the image of a city should be easily recognisable and memorable, but in any case not dwell on any single factor of attractiveness. On the other hand, it must not contradict the holistic positive perception of the country, especially in the eyes of foreign tourists. Regional features should act as a local colour to complement the image of the state, rather than emphasize possible contradictions and conflicts.

Kharkiv, the second by population city in Ukraine, has chosen the concept "smart city" as its official brand. The city wishes to be presented as an innovative and progressive one, thus

supplementing the image of Ukraine as a competitive economy in the global market but interfering a bit with its common tourist image as a country of cultural, ethnographic and green tourism.

Hollands (2008) proves that the "smart" element in the images of cities was provided by the implementation of information and communication technologies, using Internet technologies by businesses, authorities and local communities. However, it is difficult enough to distinguish the criteria for a city to be smart, and the way of assessment of final results of the realised strategy. Nowadays, almost all EU regions participate in creation of smart specialisation areas, which include the governmental support of industrial development, innovative activity and investment in research priority areas. The image of an innovative country will automatically contribute to the image of a smart, high-tech city. The last EU scoreboard names Switzerland, Sweden, Denmark, Finland and Germany among the leading innovators. Ringer (2013) says that branding in general possess unique features, despite the brand of a location (as opposed to a product) ought to modify national characteristics. If an integral country brand is not established or it is vague, separate sectoral brands may be used. The IT brand should include the description of competitive advantages, provide a market identity and clarify the origin of an IT product or service. Paganoni (2015) discovers the influence of official websites on the city image, proving that they have become an important strategic tool in communication.

Sheller and Urry (2006) indicate a city as a vivid organism which is permanently changing and developing. They use the concept of a "linear city" which is easy to move through and whose re-planning is close to analogues cities within a geographical region which helps visitors to find the sites they are interested in; though it saves its individuality. Smith (2011) highlights that the implementation of innovative technologies in branding not only expands speed and productivity in production, but changes the way of consumers' perception and thinking; people are attracted mostly by the possibility of interaction with a brand than a simple process of receiving the information about it. This note is very significant for a tourist brand, as the main purpose of travelling is interaction and involvement. Hildreth and Singh (2014) use the term "urban identity" alongside with a city brand. They advise to allocate the city brand as a mix of associations with a particular city and the city branding as the process of shaping these associations with the purpose of increasing the quality of life or economic indicators. As opposed to a company branding, developing the city identity is submitted to other rules, namely in terms of establishing the strongest associations and gaining or losing decent reputation. Gutzmer (2014) warns that branding a city is much more wider than a way to create certainly predictable reactions on the part of consumers.

Scientific publications devoted to the study of branding cities and countries refer usually to the concept of S. Anholt and his six parameters of the model of a country image, which include export – attitude of foreign buyers to goods and services produced in the country, the government – public

opinion regarding government, global perception of culture and cultural heritage, the reputation of population and tourism – the degree of interest in visiting the country and attraction of main tourist objects. Factor analysis of the brand strength in a region by the Interbrand method involves a comprehensive assessment of seven factors – leadership, stability, market, geographical coverage, trends in growth and capacity development, support and protection. City branding Index (CBI) measures the perception of a city by the following factors: appearance, location, infrastructure, people, pace and potential; ranking cities in the EU is based on economic conditions, organisational and administrative structures, financial flexibility and overall performance. Bloom consulting estimates a country, a city and a region separately, using five dimensions (according to the so-called "branding wheel") – prominence, exports, investment, talent and tourism. The methodology is based on the fact that each dimension has a distinct target audience and correspondingly each target audience has a specific need.

However, despite the recognition and ease of use of methods listed above it is not always possible to assess the tourism potential of the city with the help of them. In our opinion, the main obstacle is a component of the city's image in the eyes of visitors, including foreigners – consequently, a city which is not yet familiar to the mass tourist can not be estimated. However, the components of the mentioned ratings may be used as steps of the city plan to enhance its tourist attractiveness and to improve recreational infrastructure.

Except, perhaps, for Euro 2012, Kharkiv has not intentionally been positioned as a tourist destination. Until now it has to conquer with the image of an and environmentally unfavourable industrial city. The first, of course, should not be perceived as an exclusively negative element of the image; more than that, the current appearance of Kharkiv had been finally formed precisely in the years of strengthened industrialisation in the XXth century – the main problem is that industrial production dropped significantly and is not a drive for the city at present, and entirely new businesses and industries become the forefront. The city council, working on its image both domestic and international, prefers to use the characteristics of scientific and technological capabilities, commitment to innovation in various fields, the presence of a significant number of universities and research centres. Over the past ten years, a large-scale reconstruction of historical buildings, popular tourist sites was carried out, the general plan of the city was improved. As one of the key transport centres of Eastern Ukraine, Kharkiv can provide significant flows of passengers and cargos by road, rail and air transport (construction of a new international airport was completed by 2012). Municipal transport is represented by the subway, trolleybus, tram and bus routes. About 80 hotels of different categories and capacity provide accommodation in the city. Recreational infrastructure includes dozens of theatres, museums, art galleries, cultural and exhibition centres, over a hundred of restaurants, cafes and nightclubs. The high quality of the recreational infrastructure for leisure of families with children is

worth noting separately. Nevertheless, the volume of domestic tourist flows remains low, and foreigners visit Kharkiv mainly for business purposes. In these circumstances, some features of the national tourism industry should be explained, as an analysis of only disintegrated statistics may complicate the understanding of the problem. Number of tourist companies (mostly small agencies with a staff of employees up to 5 people) in different years varied between 400 – 600 units (the largest reduction was observed in 2014 – 2015, when the entire tourism industry of Ukraine collapsed). At the first glance, it may seem that this figure shows an exceptional tourism potential of the city. In fact, as one of the largest cities in the country and focusing high purchasing power of the local population, Kharkiv is a "supplier" of tourists travelling abroad. Official statistics is somewhat distorted by the fact that majority of large tour operators organising trips abroad, are legally registered in the capital, and therefore Kyiv distracts those travelling abroad. Ukraine still keeps the trend rather unfavourable for the national tourism industry, when only poorer strata of the population are travelling inside the country (in general, of course some exclusions exist), and people with middle and high income prefer to rest in other countries. Therefore, despite the initiatives of both businesses and local governments, domestic tourist routes do not enjoy mass popularity. In this regard, of special importance is the creation of the image of currently unpopular tourist cities able to redirect the part of internal tourist flows and attract foreign visitors. It should be noted that the possible routes of individual travellers rather than organized groups must be taken into account, since the analysis of the tourist infrastructure on the part of an independent traveller will be able to identify key gaps and the most problematic areas, which are usually solved by travel companies without the participation of visitors.

The primary task is to create a recognisable brand easy to remember, which, on the one hand, singles out the most significant association with the city and, on the other hand, does not limit the potential for the further development of tourist routes. Positioning the city exclusively as a unique industrial, creative or green (environmental) destination will surely attract the target audience, but also alienates the part of visitors, who see an attractive place to relax somewhat differently.

According to the experience of famous tourist destinations of the world, promotion of the city concept begins with the creation of visual media brand – a stylized image of the main ideas that a visitor should remember. The basis can include official colours and elements of heraldry. But this condition is not mandatory, especially when traditional elements are understandable only to specialists or, conversely, the task is to rebrand, change the concept of the city perception. Since its foundation in 1654, Kharkiv has consistently changed 6 arms. The most famous and recognisable are two – the Soviet emblem of 1968 – 1995, which represents the achievements of science and industry, and images with the crossed cornucopia and caduceus – the symbol of commerce – that made the framework of three arms (Pic. 1).



до 1725



1775 – 1878



1878 – 1887



1887 – 1919,
1941 – 1943



1968 – 1995



з 1995

Рис. 1. **Kharkiv arms**

In 2011, with the participation of specialists from the Union of Designers of Ukraine, the concept of Kharkiv as a "smart city" was developed (S – social, M – modern, A – art, R – Research, T – tourist) (Pic. 2), primarily because many young people and students live in the city, many universities and research institutions are situated there. Kharkiv surpasses even the capital by the number of foreign students (average annual arrivals make about 300 thousand people). Due to this concept, the municipality representatives focused mainly on young people and students as the most active individual tourists.



Рис. 2. **Kharkiv visual brand**

Favorite city logo for Kharkiv dwellers is a stylised image of the "Mirror stream" – a monument to the victory in World War II (Pic. 3.). This symbol is often used in official information materials and as an emblem of various activities and competitions.



Рис. 3.1. **Illuminated monument**



Рис. 3.2. **Stylised emblem**

[images from open sources and the site <http://ua.igotoworld.com>]

Children and youth tourism can become for Kharkiv the second most important tourism type after business travel, as, alongside with the common for mega-cities tourist sites, there are unique features and objects that may be visited by different ages groups. Given the current trend in organising leisure events and increase in the outlook and demands of residents and visitors, many institutions

belonging to the recreational sector develop various programmes for families with children, youth, adults, expand the range of rendered services. Interesting activities for the preschool and primary school age include the zoo (incidentally, the oldest in Ukraine – its foundation began in the 90's of the XIXth century), the contact zoo "Feldman Ecopark", the "Jungle" water park, the "Nemo" dolphinarium, the "Small southern railroad", the circus, the planetarium n.a. Y. Gagarin; the Central park of culture and rest n.a. M. Gorky (the park zone provides infrastructure for relaxing and holding mass events, it contains a variety of park amusements and sports sections), the puppet theatre and others. For older schoolchildren, along with entertainment, a review of the scientific face of Kharkiv can be suggested. The scientific demonstration educational museum "Landau Centre" began to work in 2014, whose goal is to promote the achievements of national and world science. The centre is named after the famous physicist, Nobel laureate Lev Landau, who lived and worked in Kharkiv in 1932 – 1937. Scientific school of Ukrainian physico-technical institute was known far abroad. The core of a lithium atom was split in Kharkiv in 1932 for the first time in the Soviet Union (the world's first experiment was conducted by Ernest Rutherford in 1917 with the nitrogen atom). Note that Kharkov is the only city in Ukraine that has trained and employed three Nobel laureates. Ilya Mechnikov received the prize in physiology and medicine, Simon Kuznets – in economics. Unfortunately, the world community associates the names of these famous scientists with other cities and countries – those to where they had to migrate and spend the most of their lives.

Therefore, when the city authorities faced the challenge of identifying its brand, some difficulties appeared. Kharkiv was desired to conform to the image of a high-tech innovation centre, developing and implementing the latest achievements in various fields of science. But for several reasons, including the unfavourable geopolitical situation of Ukraine, the state began to lose leadership in traditional manufacturing and advanced scientific research. The most destructive changes occurred in the 90s years of the twentieth century, when the lack of targeted support from the state and of the single state economic development strategy resulted in the closure of the city-forming enterprises, and putting many others on the brink of bankruptcy. Unfortunately, the restoration of scientific and technical potential, not only in Kharkiv, but also in other cities of Ukraine, needs now more resources than are available. Therefore, it was decided to shift to the sphere of information technologies – in the minds of consumers, it is also closely associated with innovation and scientific achievements, and does not require such a significant investment in fixed assets than other high-tech industries. At this stage, perhaps, the municipality has paid insufficient attention to the tourism image of Kharkiv, focusing precisely on the IT services sector. Therefore, not all residents of the city, as well as foreign visitors, know about different innovations in the city infrastructure, modern tourist resources, including Internet portals (containing information in English) and mobile applications developed specifically for Kharkiv.

According to the latest estimates of the Department of investment development and image projects of Kharkiv City Council, the city has 22,000 IT-specialists (the 2nd place in Ukraine after Kyiv). Most of them are graduates of technical specialties of local universities, which indirectly leads to another element in the IT image of the city – Kharkiv is the largest outsourcing hub for foreign companies in Eastern Europe, and the scope provided by employers is very diversified – from call centres and translation agencies to the development of complex embedded applications.

Is such specialisation favourable for the complex economy of the city and the country or not – is difficult to forecast at this stage. It is obvious that the mass removal of production facilities abroad (whether in material or non-material sphere) is based on cost reduction, first of all – in salaries of a highly skilled workforce. In terms of price-quality Ukrainian experts (and many of them are fluent in English) is more competitive than workers from other European and Asian countries, including India and China. But this is a very precarious advantage, as Ukraine today, because of internal conflicts, does not provide any effective state policy in the sphere of education and the promotion of talented young people, while in other countries it is a primary task of the government, regardless of its ideological beliefs. The outflow of skilled professionals abroad continues. However, during the last two or three years, it slowed a bit because of the worsening internal problems in the developed countries and the controversial immigration policy.

Nevertheless, interacting remotely with stable, innovative companies, Ukrainian specialists accumulate significant experience in order to help to implement complex projects at the initiative of local entrepreneurs and authorities. For example, now Kharkiv is the only city in Ukraine, in which all urban services and utilities (over 1,000 municipal bodies) are interconnected with high-speed Internet fiber-optic network into a single communications web. All decisions of the City council are translated into electronic form and are publicly available on the website of a single registry of urban acts. All immovable property and land within the city was digitised, the latter was also integrated into a single state cadastral map.

The above-mentioned project was implemented primarily to support entrepreneurship and simplify the access to administrative services, but it created the opportunity to implement a full-featured GIS navigation system of the city (the most popular among residents and visitors are Yandex and the Google maps, the most convenient system among off-line applications is 2GIS combining local information about 334 cities from around the world. Except in Kharkiv, it operates only in 4 regional centres of Ukraine) – that is, all possible technical solutions for the development of tourist routes, especially for tourists who prefer to travel independently were implemented. The lack of information on the most common world languages is problematic for foreign tourists at the moment. If the majority of resources has at least an interface in English, and some applications even provide the full scope of information, the official information in French, Spanish, German and other European

languages, Asian languages, including Chinese, does not still exist. It is worth mentioning that one of the largest Ukrainian diasporas of immigrants from Vietnam, South Korea, China is located in Kharkiv which would provide a solution to the language problem and completion of existing tourist materials. The diplomatic support is needed to increase the interest of residents of Asian countries in tourism potential of Ukraine and Kharkiv in particular, due to their geographical remoteness, but at the moment the efforts of our state are concentrated more in the European direction.

The other issue of outsourcing and at the same time the positive aspect of Kharkiv image for employers is the lack of clear mechanisms of regulation in the market of services; in particular, distant work on IT projects is a relatively new phenomenon for Ukraine, so the legislative regulation of this area, convenient to all parties is not work out yet. Therefore, many IT professionals prefer to work "in the shadow" and not to pay income and other taxes, and companies-employers often are not even officially registered in Ukraine, executing all financial transactions by international systems of private remittances. There is an ambiguous situation: on the one hand, Kharkiv experts receive solid experience in foreign companies, on the other – they can not specify it in the resume. Accordingly, the city can not properly position itself in the international market of information services as well as full statistical observations as for other branches of the national economy, including income from foreign investments are not held and the official resource investment potential of the city in the IT sector is represented indirectly, basically via data on educational cooperation with developers. For example, in the autumn of 2016 the national Euro-rating agency, assessing the potential of various cities of Ukraine, placed Kharkiv on the 3rd position (after Kyiv and Ternopil). According to the current methodology, the assessment was carried out in the areas of capital investment, infrastructure construction, foreign investment, the volume of services supplied to local population and employment indicators. If the data on the activities of international IT companies in Ukraine were presented by official sources, Kharkiv would possibly rose to a higher position.

Returning to the needs of the tourism industry, we note that the accumulated experience of local experts in IT projects, as well as the interest of foreign developers in a national service market would create innovative products that meet the needs of today's travellers and Kharkiv concept as a "smart city". Today, unfortunately, there is no understanding of the use of a single system of implemented innovative products, many of them, especially online resources, fulfil the necessary requirements in terms of functionality, but have unattractive design. The disadvantage is the low information capacity of many portals, especially in foreign languages. Until now, tourism is seen as an additional tool to attract funds to the city budget, so recreational infrastructure projects receive less funding. The problem is solved partially by participation in various competitions and grants, which in itself carries no negative component, but prevents a holistic, comprehensive implementation of the tourism strategy.

Also, there is a clear demarcation of the city image as a business centre while the region supports

the image of the centre of green and rural tourism. This, in some way, prevents from sharing administrative resources between city and regional councils, because technically they maintain a completely different concept of tourism development in the region. However, the "smart city" brand suggests the introduction of energy saving technologies, environmental care, that allows to expand the range of announced programmes and attract additional tourist segments. In general, we regard the selected image of Kharkiv as very positive to meet the modern pursuit of innovation and loyal to visitors and residents of the city. In the future, it would be rational to allocate a separate direction – "smart tourism", based on information technology, which would correspond to the profile of the city and help to promote the tourism brand in the long run.

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